

## About the Host Institute

Established in 1955 by the visionary industrialist Mr. B. M. Birla. BIT Mesra was founded with a clear vision to offer its young minds space, where their imagination could take wings and the fruition of their ideas. For over 6 decades now, the institute has nurtured minds with a rich heritage of academic excellence, developing learning frameworks that have been well ahead of times. Our state-of-the-art facilities are at the intersection of learning and hands-on-experience, which equip students to deep dive into real-lifework situations. From advanced labs with high-end servers to a wide gamut of print and digital learning resources in the library, students have the wherewithal at their disposal to engage in quality learning. Besides this, the campus is equipped with recreational and sports facilities that aid in the holistic development of students, preparing them for the world of tomorrow. Our students' diverse backgrounds, the balance of technical and soft skills make them well placed for not just exponential growth in their respective careers, but also for contributing to the success of any organization they join.



## *Virtual International Conference on Soft Computing, Optimization Theory and Applications (SCOTA 2021) March 26-27, 2021*



**Organized & Sponsored by  
Department of Mathematics  
Birla Institute of Technology  
Mesra, Ranchi- 835215  
Jharkhand, INDIA**

## About the Department

The Department of Mathematics is one of the oldest departments of the Institute and handles all mathematics courses offered in different branches of Sciences, Engineering, Management, Pharmaceutical Sciences, and Architecture etc. The department runs a PhD Programme, a 2-Year MSc program in Mathematics and five-year Integrated MSc Programme in Mathematics and computing. The department has set up modern computer center with latest software such as MATLAB, Mathcad, Mathematica, SPSS, and open-sourced softwares etc. The faculty members of the department are engaged in research and development activities. The areas where research is in progress are Solid Mechanics, Parallel Computing, Fuzzy Optimization, Operations Research, Differential Equations and Finite Element Methods in engineering problems. It has also been actively engaged in organizing conferences, seminars, summer, and winter schools and has also initiated organizing seminars (two in each months) for spreading more knowledge to students.

## About the Conference

The international conference SCOTA 2021 is to be organized to stimulate the communication between scientists, engineers, mathematicians, researchers, practitioners and industrials from a variety of related disciplines around the world to exchange their innovations, interact and share the research outcomes. This will strengthen our research activities, improve technologies leading to the development and improvement as a global society. The objective of this Conference is to provide a common platform and promote the essence of innovative idea and new information among the researchers across the world. This is a platform where the delegates and the scholars will get to connect to each other and upgrade their knowledge and stream.

The conference is open to faculty members from any academic institutes (degree & diploma), research scholars, UG/PG Students (M. Tech., MBA and M.Sc.) and industry personnel.

## Topics To Be Covered

Computational optimization, Engineering Optimization and Design, Bio-inspired computing and algorithms, Artificial Intelligence, Machine Learning, Deep Learning, Big Data, Data Mining, Fuzzy systems, Metaheuristic Optimization Algorithms, Optimization in Economics and Finance, Game Theory, Fixed Point method in Optimization, Biomathematics, Optimal Control, Optimization Software, Recent advances and applications of Optimization in Natural Sciences, Social Sciences, Engineering, Data and Information Mining, Biology, Medicine etc.

## Registration Details

The registration fees for the program shall be **Rs. 600/- (+18% GST) i.e. Rs. 708/- for Faculty** from academic institutions; **Rs. 300/- (+18% GST) i.e. Rs. 354/- for Research Scholars & UG/PG students** and **Rs. 1000/- (+18% GST) i.e. Rs. 1180/- for Industry personnel**. For Foreign delegates: The registration fee is 1000/- INR(+18% GST) i.e. **1180 INR for Research Scholars & UG/PG**

**students and 2000/- INR(+18% GST) i.e. 2360 INR, for others**

**E-certificates will be sent to the participants by email after successful completion of the programme.**

## Important Dates

- **Abstract submission deadline - March 18, 2021**
- **Last date of registration – March 22, 2021**
- **Date of Conference – March 26-27, 2021**

## Details of account for Fee Submission

Account Holder name: BIRLA  
INSTITUTE  
OF  
TECHNOLOGY

Account Number: 017501015718  
Branch Name: ICIC Bank Ltd, Ranchi  
Branch, Main Road  
Ranchi-834001

Bank IFSC: ICIC0000175  
BIT GST No. :20AAATB3286H1Z4  
BIT PAN No: AAATB3286H  
Registration can be done using the following link:

**LINK:**<https://forms.gle/6Ga7i63d6kxazEF8>



## Conference calls for papers 2021

Abstracts of the unpublished papers are welcomed for the presentation at SCOTA2021. After the conference authors are invited to submit original unpublished research papers for publication in reputed conference proceedings and journals. Submitted paper must be full text paper, including results, tables, figures and references. Full text papers (.docx and .doc as per given template) will be accepted by electronic submission form. Manuscripts should meet the format set by the conference committee and are subject to review by the experts.

Full length paper will be submitted via [ONLINE SUBMISSION FORM](#).

## Organizing Committee

### Chief Patron:

**Prof. Indranil Manna - Vice Chancellor, BIT Mesra, Ranchi**

### Chairman:

**Prof. Seshadev Padhi - Head, Dept. of Mathematics, BIT Mesra, Ranchi**

## Convener

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## Co-Conveners

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## Department Committee

- Prof. S.K. Jain
- Prof. S. Chakraborty
- Dr. P. Tiwari
- Dr. A.P Ghorai

- Dr. Prabjot Kaur
- Dr. Abhinav Tandon
- Dr. Randhir Singh
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- Dr. P. K. Shaw

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- Prof. J.K. Kim, Kyungnam University, Masan, South Korea
- Prof. Poom Kumam, KMUTT Bangkok, Thailand

### **Tentative List of Indian Speakers**

- Prof. Manoj Kumar Tiwari, Director, NITIE, Mumbai
- Prof. Sankar Kumar Pal, ISI Kolkata
- Prof. U. B. Desai, IIT Hyderabad
- Prof. D. Khemani, IIT Madras
- Prof. Anindya Chatterjee, IIT Kanpur
- Prof. A. Ojha, IIITDM, Jabalpur
- Prof. Mohammed Tanveer, IIT Indore
- Dr. Pankaj Dutta, IIT Bombay
- Prof. Snehashish Chakraverty, NIT Rourkella.
- Prof. S. Kar, NIT Durgapur
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- Dr. Aruna Tiwari, IIT Indore
- Dr. R. K. Jana, SVNIT, Surat
- Dr. Y. Prasad, IIT Jammu
- LV Subramaniam, IBM

### **Tentative list of International Speakers**

- Prof. S. Lakshmivarahan, University of Oklahoma, USA
- Prof. B. Sarkar, Yonsei University, South Korea
- Prof. Baoding Liu, Tsinghua University, Beijing, China
- Prof. Jershan Chiang, Chinese Culture University, Taipei, Taiwan
- Prof. Leopoldo Eduardo Cárdenas-Barrón, Tecnológico de Monterrey, Mexico
- Goutam Chakraborty, Japan
- Ljiljana Brankovic, University of Newcastle, Australia
- Prof. Kailash C Patidar, South Africa
- Irina Perfilieva, , Czech Republic
- Dr. Lalit Garg, , Malta
- Dr. Soujanya Poria, Singapore
- Michael Gr. Voskoglou, Greece
- Prof. Erik Cambria, Singapore
- Prof. Bengt Lennartson, Sweden
- Prof. Urmila Diwekar, USA
- Eric de Sturler, UIUC, USA
- Carlos A. Coello, Mexico

- Prof. Kalyanmoy Deb, Michigan ,State University, USA
- Sven Leyffer, Argonne National Laboratory, USA
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- Prof. A. K. Jain, MTU, USA
- Ajith Abraham, MIR Lab
- Prof. Oscar Castillo, Tijuana Institute of Technology, Mexico
- Prof. Yasunori Kimura, Toho University Japan
- Prof. W. Sintunavarat, Thammasat University, Bangkok, Thailand
- Prof. Mehdi Asadi Islamic Azad University, Iran
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- Prof. Gülder Kemalbay, Yıldız Technical University, Turkey